

# Snapshots

September 2007

BLM

## Table of Contents

### Utah

Wildfires Can Destroy Greater Sage Grouse Habitat ..... 1

Fire Officials Share Some Good News: Fuels Project Slows Wildfire ..... 2

### Colorado

Hazardous Fuel Treatment Areas Used to Manage Fire Use ..... 3



*Jennifer Smith, editor*  
*Sheri Ascherfeld, layout and design*

## Utah

### Wildfires Can Destroy Greater Sage Grouse Habitat

Extreme wildfires can destroy sage grouse habitat when large areas of sagebrush are consumed during a fire. Throughout their life cycle, sage grouse utilize a variety of plant communities which are typically composed of moderate amounts of sagebrush and a healthy mix of forbs and grasses. The grouse require sagebrush as protective cover from predators while rearing their young on high protein insects, grasses and forbs. High intensity range fires often remove the majority of vegetation and sterilize the soil. After these intense fires occur invasive annual weeds such as cheat grass take advantage and eventually dominate these open landscapes. Once established, cheatgrass will increase the susceptibility of a landscape to future fires unless expensive plant restoration efforts are undertaken. Although fires in spring and early summer may kill sage grouse chicks incapable of flight, the real threat to population survival occurs in the years following fire due to the long term loss of breeding, nesting, and brooding habitats.

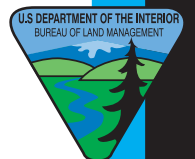


*The BLM is undertaking efforts to restore and maintain healthy sagebrush ecosystems. The fuelbreaks can be formed by clearing or thinning vegetation in thick continuous fuels.*

The Bureau of Land Management is undertaking efforts to restore and maintain healthy sagebrush ecosystems. Preventative fuels reduction treatments reduce the risk of large wildfires by providing fuel breaks which can be used by firefighters to quickly contain small wildfires before they grow large. These fuel breaks



*The BLM prescribed fire near Sage Creek in Rich County helped vegetation in this area recover naturally.*



can be formed by clearing or thinning vegetation along roads or planting fire resistant vegetation strips in thick continuous fuels such as sagebrush. These efforts will ultimately pay for themselves by reducing future fire suppression costs and reducing the size of individual fires that threaten sage grouse habitat.

Not all fires are harmful to sagebrush ecosystems. Small, low intensity fires may help to create new habitat by thinning or opening small gaps in sagebrush stands that are currently too thick for the birds to use as habitat. These “cool” burning fires don’t kill the dormant seed in the soils; therefore, vegetation may naturally recover after a low intensity fire. Fuels reduction treatments and the proper use of prescribed fire are tools that will help maintain and restore healthy sage grouse habitat and other important components of rangeland ecosystems.

*Contact: Eric LaMalfa, Fire/Fuels Program, Salt Lake Field Office,*

### Fire Officials Share Some Good News: Fuels Project Slows Wildfire

On July 16, 2007 the Bedke and Pine Creek Fires burned on the same day, in the same fuel type, within mere miles of each other. Firefighters watched with angst as the fires raged through juniper, sagebrush and trees. When the smoke cleared on both fires the Pine Creek fire had consumed only a tenth of the acreage of Bedke. The difference between the two was a hazardous fuels reduction project implemented in 2004.

#### Witness Account

“Once the flames hit the project area the fire was reduced from fast to slow; from crown to ground,” says Jeff Kline, fire management officer, Salt Lake Field Office.

Kline had a bird’s eye view of fire activity before and after flames hit the Cook Canyon project. During large fires, Jeff was perched in the sky aboard an aerial attack command plane, directing firefighting actions on the ground.

Kline reported that before the Pine Creek fire hit this fuels project, it was fast moving crown fire. He saw a flame front move right through a heavy retardant line, like it wasn’t even there.

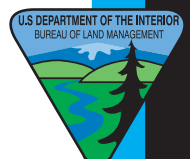
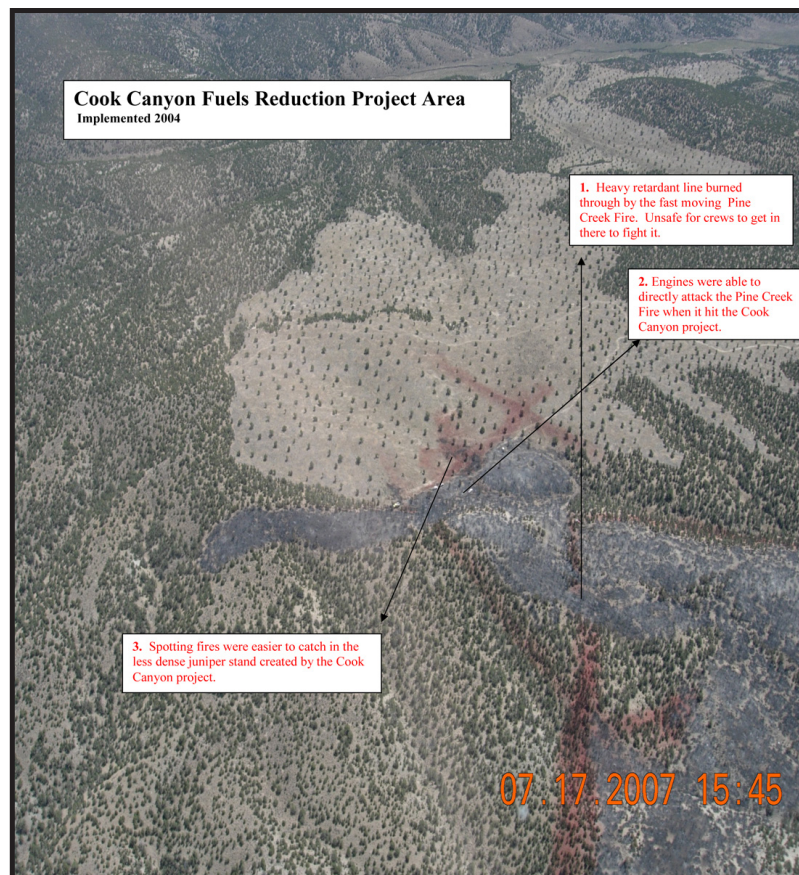
“Flames were dropped to their knees,” Kline said.

“When flames hit the fuelbreak the fire was reduced from fast to slow; from crown to ground. A change in fire behavior translated to a change in their tactics. The slower fire provided a safe area for ground forces to directly attack the fire with help from retardant and bucket drops.”

#### Background

The vegetation in the Cook Canyon project area was dominated by large, dense stands of juniper. This area had a high potential to carry intense, fast-moving fires. This area needed treatment to create a fuel break of less flammable fuels. A fuel break is expected to help lessen the potential severity and intensity of wildland fires that could threaten the surrounding environment and communities.

During 2004, the juniper was thinned with a BLM Bullhog to increase spacing between trees to 30-60 feet by eliminating selected junipers and leaving a variety of sizes and ages on the landscape. The treatment





was constructed in a mosaic pattern following natural geographical features that are beneficial from a fire suppression and fire behavior point of view.

*~excerpt from the Cook Canyon Monitoring Report, 2004, Salt Lake Field Office, BLM*

### Other Benefits of the Fuels Project

Tyler Staggs, range conservationist for the Salt Lake Field Office, noted that fuels projects, like the Cook Canyon project, also benefit natural resources.

Staggs explained, “Cook Canyon helps open up a tree dominated ecosystem to a more natural plant community. Removing some of the trees restored the proportion of shrubs and grasses to a healthier state, which also provides adequate cover and food for wildlife and livestock.”

*Contact: Erin Darboven, 801-243-0004*

## Colorado

### Hazardous Fuel Treatment Areas Used to Manage Fire Use

In the summer of 2004, the BLM Uncompahgre Field Office completed a series of rollerchop treatments in pinyon-juniper to buffer private property near the town of Redvale in west-central Colorado. In July 2007, these treated areas proved very valuable for firefighters on the Section 28 wildland fire use fire, which burned 135 acres. The treatments met their objective of changing fire behavior from a crown fire to a surface fire and reducing heat intensity. In addition, crews had access to the treated areas and were able to link the treated patches, which range in size from three to 20 acres, with dozer line to secure a southern control line. If the fire had continued to spread in the south-southeast direction, the plan was to continue the line to the east connecting additional treated patches to cut off fire spread in the direction of structures about a mile away.

When the Section 28 fire was designated a fire use fire on July 6, 2007, it was three miles north of the town of Redvale and about two miles from the closest structures. It started in an area where the primary management objective was for mule deer winter range. Given the prevailing winds and weather predictions for that area, for the first few days fire managers were expecting the fire to burn in a north to northeast direction. The preliminary maximum manageable area (MMA) allowed

for fairly large fire growth in that direction. Managers identified the structures to the south as a concern, but they were certain that the fuels treatments would make it possible to secure a control line in the event the fire moved in that direction. They were not as concerned with the nearby private lands to the east. These private landowners were very supportive of fire use and had given their permission to allow the fire to cross onto their land.

Over the course of the next two days, the fire grew from the initial size of about one-half acre to just over an acre. It was burning in pinyon-juniper with a grass understory. The fire primarily stayed on the ground, creeping through the grass and occasionally torching a tree. However, on the third day of the fire, the wind picked up and fire activity intensified. By midday, the fire started making runs to the south and southeast through the crowns of the pinyon-juniper. During the hottest part of the burning period, the fire spotted into the treated areas to the south and east. The rate of spread increased as the fire ran through the lighter fuels in the treated areas. The fire burned through three of the rollerchopped areas and spotted into a fourth. Nevertheless, because the fire dropped to the ground in the treated areas and was burning in lighter fuels, the flame lengths were significantly reduced, which in turn reduced the resistance to control. As the fire continued to spread to the south, it hit a trigger point for initiating suppression action on that portion of the fire. The treatment areas allowed firefighters to move dozers and engines into the areas to cut line connecting the treatment areas and to do a light burn out to reinforce the line.

The fire burned actively for another day, growing to 135 acres by the end of the fourth day. Structure-protection engines and air tankers were used for additional support once line was built, but the dozer line and treated areas easily held the southern edge of the fire. On the fifth day, the fire received enough rain to significantly slow fire activity. Resource advisors decided to have firefighters put out the fire at that point because the fire size and intensity had met their objectives for mule deer habitat. Over the next few days, firefighters finished securing the fire and mopping up along the perimeter. They monitored the fire's interior activity for another week until there were no longer signs of active burning. The fire was declared out on July 26, 2007.

*Contact: Dan Huisjen, Fire Ecologist, Montrose Interagency Fire (970) 240.5339.*

